

IN THE ABSTRACT

Please delete the Abstract of the application and substitute the following:

ABSTRACT

A method of producing a cladding tube for nuclear fuel for a nuclear pressure water reactor includes forming a tube which at least principally consists of a cylindrical tube component of a zirconium-based alloy, where the alloying element, except for zirconium, which has the highest content in the alloy is niobium, wherein the niobium content in weight percent is between about 0.5 and about 2.4 and wherein no alloying element, except for zirconium and niobium, in the alloy, has a content which exceeds about 0.2 weight percent. The cladding tube is then annealed such that the tube component is partly but not completely recrystallized. The degree of recrystallization in the tube component is higher than about 40% and lower than about 95%. A fuel assembly for a nuclear pressure water reactor also has a plurality of such cladding tubes.